Art Unit: 1753

Examiner: Versteeg, Steven H.

In the claims:

Please cancel claim 15, without prejudice or disclaimer.

Please amend the claims as follows:

1. (Previously Presented) A method of coating a substrate, comprising:

providing a substrate having a surface;

forming a polymeric layer on the surface of the substrate by electrophoretically applying a layer of a polymeric precursor to at least a portion of the surface;

polymerizing the polymeric precursor to form a polymerized layer; and applying a metal coating to at least a portion of the polymerized layer;

wherein the metal coating is applied under sub-atmospheric conditions, and wherein the step of forming the polymerized layer includes elevating the temperature of the polymeric precursor to a temperature of at least about 320°F.

- 2. (Canceled)
- 3. (Canceled)
- 4. (Previously Presented) The method of claim 1, wherein the polymeric precursor is selected from the group consisting of acrylics, epoxies, urethanes, and combinations thereof.
- 5. (Original) The method of claim 1, wherein the substrate is porous, and further comprising leveling the surface of the substrate before the step of applying the metal coating.

Page 2 of 6

Art Unit: 1753

Examiner: Versteeg, Steven H.

- 6. (Original) The method of claim 5, wherein the metal coating is applied using a physical vapor deposition method.
- 7. (Original) The method of claim 6, further comprising the step of removing a portion of the polymerized layer before applying the metallic coating.
- 8. (Original) The method of claim 7, further comprising cleaning at least the polymerized layer before the step of removing a portion of the polymerized layer.
- 9. (Original) The method of claim 6, wherein the metal coating is applied in a pressure range of about 5x10⁻⁴ millitorr to about 2x10⁻³ millitorr.
 - 10 (Original) The method of claim 6, wherein the metal coating is applied by evaporation.
- 11. (Previously Presented) The method of claim 1, further comprising maintaining the polymeric precursor at the temperature for at least about 12 minutes.
 - 12. (Original) A method of coating a surface, comprising:

providing a substrate;

coating at least a portion of the substrate with a layer of an electrophoretically applied polymeric precursor;

polymerizing the polymeric precursor to form a first polymeric coating; and elevating the temperature of the polymeric coating to at least about 400°F for at least about 6 minutes.

13. (Original) The method of claim 12, further comprising applying a layer of metal over at least a portion of the polymeric coating.

Page 3 of 6

Art Unit: 1753

coating.

Examiner: Versteeg, Steven H.

14. (Original) The method of claim 13, further comprising applying a second polymeric coating over the layer of metal.

15. (Canceled)

16-24 (Canceled)

25. (Original) A method of coating a substrate, comprising:

providing a substrate having a porous surface;

forming a polymeric layer on the surface of the substrate by electrophoretically applying a layer of a polymeric precursor to at least a portion of the surface;

polymerizing the polymeric precursor to form a polymerized layer; and applying a metal coating to at least a portion of the polymerized layer; wherein the metal coating is applied under sub-atmospheric conditions; and wherein the surface of the substrate is leveled before the step of applying the metal

- 26. (Original) The method of claim 25, wherein the step of forming the polymerized layer includes elevating the temperature of the polymeric precursor to a temperature of at least about 320°F.
- 27. (Original) The method of claim 25, wherein the polymeric precursor is selected from the group consisting of acrylics, epoxies, urethanes, and combinations thereof.

Art Unit: 1753

Examiner: Versteeg, Steven H.

- 28. (Original) The method of claim 25, wherein the metal coating is applied using a physical vapor deposition method.
- 29. (Original) The method of claim 25, further comprising the step of removing a portion of the polymerized layer before applying the metal coating.
- 30. (Original) The method of claim 29, further comprising cleaning at least the polymerized layer before the step of removing a portion of the polymerized layer.
- 31. (Original) The method of claim 25, wherein the metal coating is applied in a pressure range of about 5×10^{-4} millitorr to about 2×10^{-5} millitorr.
 - 32. (Original) The method of claim 25, wherein the metal coating is applied by evaporation.
- 33. (Original) The method of claim 26, further comprising maintaining the polymeric precursor at the temperature for at least about 12 minutes.